

REMARKS

In response to the Office Action dated May 4, 2006, claims 1-3, 5, 8, 10, 13, 14, 15, 18, 19, 21-23, 25, 26, 30 and 31 have been amended, and claim 32 has been added. Claims 1-10, 14, 22-26, 30 and 32 are now active in this application. No new matter has been added. Claims 11-13, 15-21, 27-29 and 31 are withdrawn from consideration as directed to non-elected species.

CLAIM 31

On page 2 of the present Office Action, under the section Election/Restrictions, the Examiner asserts, "However, in the Reply filed February 10, 2006, Applicant indicated that Claim 31 is also drawn to the elected species of Figures 1 - 5. The Examiner disagrees with Applicant's position. Claim 31 requires the "modules" shown in non-elected species of Figure 10."

However, such assertion by the Examiner does not establish that claim 31 is **NOT** readable on the species of Figures 1-5, notwithstanding the fact that modules are required. The burden is always upon the Examiner to establish that a claim that Applicants indicate is readable on elected species is, in fact, **NOT** readable on the elected species. Such burden has not been met as the Examiner has merely asserted is that claim 31 is readable on the non-elected species of Figure 10. However, a claim can be readable on both an elected species and a non-elected species; i.e., it is generic to both.

Since the Examiner has not established that claim 31 is **NOT** readable on the species of Figures 1-5, as Applicants have asserted, the holding that claim 31 is withdrawn from consideration is improper and claim 31 should be examined.

Furthermore, it should be noted that claim 31, except for its preamble and the use of the words "a module for", corresponded to method claim 22, which is readable on the elected species of Figures 1-5. Consequently, no reasonable basis exists to hold that claim 31 is **NOT** readable on the elected species of Figures 1-5.

As claim 31, as amended, is readable on the elected species of Figs. 1-5, examination of claim 31, as amended, is respectfully solicited.

OBJECTION TO CLAIMS 7 AND 8

Claims 7 and 8 have been objected and the Examiner has asserted that there is no antecedent support for reciting "said depth distribution". The actual recitation is "said depth distribution information"

By this response, independent claim 1 has been amended to initially recite "depth distribution information", thereby providing antecedent support for the recitation of "said depth distribution information" in claims 7 and 8, which indirectly depend from independent claim 1. Consequently, withdrawal of the objection to claims 7 and 8 is respectfully solicited.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102 AND § 103

I, Claims 1-3, 5-7, 9, 10 and 22-24 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Lyons (USPN 6,734,911).

Independent claim 1 has been amended to recite:

An image processing apparatus, comprising:
an image data input unit for inputting image data of a plurality of objects
including a main subject;

a range setting unit for restricting a searching range in the depth direction for searching said main subject from the plurality of objects using the input image data; and

a partial image extracting unit for extracting a partial image including said main subject from said image data based on depth distribution information indicating a distance to each of said plurality of objects included in said image data, a depth direction of said partial image being restricted to said searching range set by said range setting unit.

Applicants believe that the Examiner improperly regards the "tracking system (15)" in Lyons as the "range setting unit", recited in claim 1 and carrying out the step of "setting a searching range", recited in claim 22.

As recited in amended independent claim 1, as well as original claim 1, the range setting unit in the present invention restricts a searching range in the *depth direction*. Amended independent claim 22 also restricts a *depth direction* of the partial image to the searching range set by the step of setting a searching range. Depth direction is well known in the photography art to mean a distance from a camera or photographer (see, for example, page 16, lines 25-27 of the present application). Thus, in the present claims, the searching range is restricted a certain distance range from a camera or a photographer. By restricting the searching range in the depth direction, the image processing apparatus can be prevented from misidentifying the target object, placed at different depths, as one object in detecting a main subject, since objects at different depths are excluded from a searching target. Furthermore, since searching range is restricted to a place of depth having a high possibility of the existence of a main subject, the time for detecting a main subject can be shortened.

In contrast, the tracking system 15 of Lyons restricts the *view angle*. That is, in Lyons, the searching range is **NOT** related to depth information, but only to the view angle. See, for example, column 7, line 55 to column 8, line 1 of Lyons, which describes:

Referring also to FIG. 1A, output signals 13B corresponding to the peripheral region 27 of the image sensor 43 are provided to the tracking system 15. Based on these output signals 13B, the tracking system 15 determines when the image of the OBT has moved to a position where the OBT is not being imaged by the central region 26 of the image sensor 43. *The tracking system 15 then generates drive signals 15B, which are applied to the PT base 16 upon which the camera 14 is mounted, to re-aim the camera 14 so as to move the image of the OBT back onto the central region 26 of the image sensor 43.*

Preferably, *the drive signals 15B effect re-aiming by driving motors in the pan and tilt base (PT base) 16 so as to adjust the aim of the camera 14 in the desired direction.* (Emphasis added)

Tilt and pan clearly relate to view angle and view angle is clearly different from depth information. In addition, Lyons does not disclose or suggest anything regarding restricting a searching range in the *depth direction*, let alone the benefits disclosed in the present invention that are achieved by restricting a searching range in the *depth direction*. Consequently, amended independent claims 1 and 22 are patentable over Lyons, as are dependent claims 2, 3, 5-7, 9, 10, 23 and 24, as amended.

II. Claims 14 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyons.

However, as claims 14 and 30 depend directly or indirectly from amended independent claims 1 and 22, respectively, they are patentable over Lyons also.

While claims 14 and 30 are patentable over Lyons, the following comments are providing regarding the Examiner taking Official Notice “that both the concepts and advantages of

MSW/EJW/vd

providing a timing condition storing unit for storing a predetermined photographic timing condition relating to said main subject; and a timing signal output unit for outputting said photographic timing signal to said image capturing unit when said main subject satisfies said photographic timing condition are well known and expected in the art”.

Such taking of Official Notice is respectfully traversed.

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Examiner. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 223 USPQ 785 (Fed. Cir. 1984). In rejecting a claim under 35 U.S.C. §103, the Examiner must provide a factual basis to support the obviousness conclusion. *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 357 F.2d 385, 148 USPQ 721 (CCPA 1966); *In re Freed*, 425 F.2d 785, 165 USPQ 570 (CCPA 1970). Based upon the objective evidence of record, the Examiner is required to make the factual inquiries mandated by *Graham v. John Deere Co.*, 86 S.Ct. 684, 383 U.S. 117, 148 USPQ 459, 469 (1966). The Examiner is also required to explain how and why one having ordinary skill in the art would have been led to modify an applied reference and/or to combine applied references to arrive at the claimed invention. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Applicants stress that what may be generally known in some general context does not necessarily render the now claimed subject matter as a whole obvious within the meaning of 35 U.S.C. § 103. The Examiner has not factually established the requisite prospective motivation to support a *prima facie* case of obviousness under 35 U.S.C. § 103. *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995).

Clearly, the above finding by the Examiner of what is “well known and expected in the art” is **NOT** based on any evidence in the record and, therefore, lacks substantial evidence support. In the case of *In re Zurko*, 258 F.3d 1379, 59 USPQ2d 1693 (Fed. Cir. 2001), the Federal Circuit overturned a decision of the Board of Patent Appeals and Interferences (Board) that was based on the Board merely asserting something to be of “common knowledge” *without supporting evidence* of record. See also *In re Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002).

As no factual basis has been proffered by the Examiner to support the above noted assertions regarding the timing condition storing unit and the timing signal output unit, the record, therefore, lacks substantial evidential support for the assertions. Consequently, claims 14 and 30 are patentable over Lyons as the Examiner has failed to establish a *prima facie* case of obviousness.

III. In view of the above, the allowance of claims 1-3, 5-7, 9, 10 and 22-24 is respectfully solicited.

REJOINDER

If claims 1-3, 5-7, 9, 10 and 22-24, as amended, are allowable, claims 11-13, 15-21 and 27-29 (and 31) will depend from claims that are allowable. In such case, withdrawal of the restriction requirement as to claims 11-13, 15-21 and 27-29 (and 31) [non-elected species] and examination on the merits of these formerly non-elected species are respectfully solicited (see MPEP § 821.04 Rejoinder).

NEW CLAIM

New claim 32 is submitted and recites:

A computer program product comprising a recording medium, having recorded thereon a program for processing an image, by performing the operations of:

- inputting image data of a plurality of objects;
- setting a searching range, which defines the depth length for searching a main subject in said image data;
- extracting a partial image including said main subject from said image data based on depth distribution information indicating a distance to each of said plurality of objects included in said image data, a depth direction of said partial image being restricted to said searching range;
- detecting said main subject from said partial image; and
- receiving predetermined main subject information relating to detected said main subject.

Claim 32 corresponds to amended independent method claim 22, as amended, but is directed to a computer program product. As amended independent claim 22 is believed to be allowable, claim 32 is believed to be allowable also.

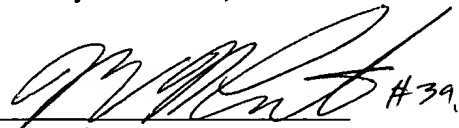
CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Edward J. Wise (Reg. No. 34,523) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: _____

Respectfully submitted,

By  #39,491
f- Marc S. Weiner
Registration No.: 32,181
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant


MSW/EJW/vd